

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claims 5 and 12 have been canceled without prejudice or disclaimer. Claims 1 and 8 have been amended to incorporate the subject matter of now canceled claims 5 and 12, respectively. Claims 1 and 8 have also been amended for readability purposes by replacing the term "characters" with "characteristics". Claims 1 and 8 have further been amended to recite "wherein the first optically anisotropic layer further contains a fluorine-containing polymer in the range of 0.005 to 8 wt.% based on the amount of components of a coating solution other than a solvent." Support for such amendments can be found in the instant specification at least at page 49, lines 26-31. Claims 6 and 13 have been amended to depend from claims 1 and 8, respectively, in light of the cancellation of claims 5 and 12.

New claims 19 and 20 have been added which depend from claim 1, and new claims 21 and 22 have been added which depend from claim 8. Support for such new claims can be found in the instant specification at least at page 49, lines 20-26.

In the Official Action, claims 1 and 8 stand objected to for reciting the term "characters". This objection is moot in light of the above amendments in which the term "characters" has been replaced with "characteristics", consistent with the Examiner's suggestion. Accordingly, withdrawal of the objection is respectfully requested.

Claims 1-14 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0218709, hereinafter "the '709 publication". Withdrawal of this rejection is respectfully requested for at least the following reasons.

The '709 publication relates to an optical compensatory sheet, a polarizing plate and a liquid crystal display using the same. Paragraph [0001]. An optically anisotropic layer prepared from a liquid crystal compound is provided on a cellulose acetate film to produce the optical compensatory sheet. Paragraph [0275]. Details concerning the manner in which the optically anisotropic layer is prepared are discussed in paragraphs [0303] to [0367] of the '709 publication.

The '709 publication does not disclose each feature recited in independent claims 1 and 8, and as such fails to constitute an anticipation of such claims. For example, the '709 publication does not disclose that the first optically anisotropic layer further contains a fluorine-containing polymer, as recited in claims 1 and 8. The '709 publication has no recognition of a fluorine-containing polymer being contained in an optically anisotropic layer that is made from discotic compounds oriented in hybrid alignment, i.e., a layer corresponding to the first optically anisotropic layer presently claimed. There is no mention of the use of a fluorine-containing polymer at paragraphs [0303] to [0367] of the '709 publication, which disclosure pertains to the manner in which the optically anisotropic layer is prepared. Further, none of the exemplary optically anisotropic layers prepared in the manner described at paragraphs [0499], [0544], [0568], [0619], [0653], [0676], [0801] and [0810] of the '709 publication employ a fluorine-containing polymer.

And certainly, the '709 publication fails to disclose that the fluorine-containing polymer is contained in the range of 0.005 to 8 wt.% based on the amount of components of a coating solution other than a solvent, as also recited in claims 1 and 8.

Furthermore, the '709 publication does not disclose that the optical compensatory film gives retardation values $Re(0^\circ)$, $Re(40^\circ)$ and $Re(-40^\circ)$ at 546 nm in the ranges of 30 ± 10 nm, 50 ± 10 nm and 115 ± 10 nm, respectively, as recited in claims 1 and 8. Concerning such

claimed retardation values, the Patent Office has taken the position that "these properties would be presumed to be inherent in the invention of Ito, since the structure of the claimed invention is substantially identical to that disclosed by Ito." Official Action at page 5. As discussed above, claims 1 and 8 have been amended to further clarify the differences between the recited first optically anisotropic layer and the layer disclosed by the '709 publication. Specifically, claims 1 and 8 now recite that a fluorine-containing polymer is contained in the first optically anisotropic layer in the range of 0.005 to 8 wt.%. The '709 publication has no disclosure of such fluorine-containing polymer contained in the optically anisotropic layer.

In view of the above, it is clear that the recited first optically anisotropic layer is distinct from the optically anisotropic layer disclosed by the '709 publication. Accordingly, for at least this reason, withdrawal of the above anticipation rejection under 35 U.S.C. §102 is respectfully requested.

Applicants have surprisingly and unexpectedly discovered that by employing a fluorine-containing polymer in the preparation of an optically anisotropic layer made from discotic compounds oriented in hybrid alignment, retardation values $Re(0^\circ)$, $Re(40^\circ)$ and $Re(-40^\circ)$ at 546 nm of an optical compensatory film in the ranges of 30 ± 10 nm, 50 ± 10 nm and 115 ± 10 nm, respectively, can be attained. This can in turn lead to improved viewing angle characteristics in the optical compensatory film. Applicants have observed that absent the use of such fluorine-containing polymer in accordance with aspects of the claimed invention, it can be difficult to attain an optical compensatory film having such retardation values and improved viewing angle characteristics.

To further exemplify the surprising and unexpected nature of the claimed invention, attached for the Examiner's consideration is a Declaration Pursuant to Rule 132 of Yoji Ito.¹ The Declaration sets forth a comparative experiment which was conducted to observe the effects of the use of a fluorine-containing polymer in the preparation of an optically anisotropic layer of an optical compensatory film. Specifically, the comparative experiment was conducted in a manner similar to that of Example 5 described at pages 75-82 of the instant specification, except that no fluorine-containing polymer was employed in the comparative experiment. The results are shown in Tables A and B of the Declaration.

As can be seen from Table A, the comparative experiment did not exhibit $\text{Re}(40^\circ)$ and $\text{Re}(-40^\circ)$ values within the ranges of 50 ± 10 nm and 115 ± 10 nm, respectively. Examples 5 and 6, on the other hand, exhibited $\text{Re}(40^\circ)$ and $\text{Re}(-40^\circ)$ values within such ranges. From such experimental data, it is apparent that the use of the fluorine-containing polymer can have a significant effect on the optical characteristics of the optical compensatory film. Referring to Table B, Examples 5 and 6 exhibited improved viewing angle characteristics in comparison with those of the comparative experiment. As evidenced by such results, Applicants submit that attaining the $\text{Re}(0^\circ)$, $\text{Re}(40^\circ)$ and $\text{Re}(-40^\circ)$ values discussed above can have beneficial effects on the viewing angle characteristics of the optical compensatory film.

The surprising and unexpected nature of the claimed invention is apparent upon review of the comparative experimental data provided in the Declaration. Accordingly, for at least this reason, it is apparent that the claims are allowable over the '709 publication.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

¹ Yoji Ito is an inventor of subject matter of both the present application and the '709 publication cited by the Patent Office in the §102(e) rejection, discussed above.

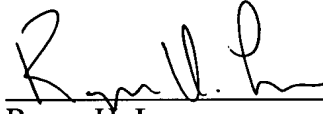
If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 27, 2007

By:

A handwritten signature in black ink, appearing to read "Roger H. Lee", is written over a horizontal line.

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